Apparatus for Ultra-Violet Light Therapy

Allen & Hanburys Ltd.
48 WIGMORE STREET, LONDON
W.1.

22500633730

Apparatus for Ultra-Violet Light Therapy

Allen & Hanburys Ltd.

Manufacturers of Surgical Instruments and Appliances, Aseptic Hospital Furniture & Electro Medical Apparatus

48 Wigmore Street, London, W. 1.

TELEPHONE 6476 MAYFAIR (FOUR LINES)
TELEGRAMS "ORTHOPEDIC, WESDO, LONDON"
HOURS OF BUSINESS 9 a.m. to 9 p.m. (including holidays) Sundays excepted.

WELLCOME INSTITUTE LIBRARY
Coll. welMOmec
Coll. pam
No. WB 480
192*
A42a

PRICE LIST for

Ultra-Violet Light and Heliotherapy Apparatus

	£	s.	d.
3100 ...	45	0	0
3102 ...	37	10	0
3103/A ...		7	6
/B ...		8	0
/C		10	0
/D ...	2	12	6
3104 ...	37	10	0
3105 ...	35	0	0
3107 ...	20	10	0
/H ...	25	0	0
3108 ...	2	10	0
3110 ...	37	10	0
3111 ...	33	0	0
3113 ...	23	10	0
3114 ...	21	10	0
3115 ...	2	10	0
3116 ...	26	0	0
3117 ...	1	10	0
3122 ...	10	0	0
3123 ...	12	0	0
3126 ...	45	0	0
3128 ...	75	0	0
3129 ...	12	12	0
3129/J ...	55	0	0
3130 ...	32	10	0
3131 ...	50	0	0
3133 ...	22	0	0
3134 ...	40	0	0
3137 ...	17	0	0
3138 ...	36	0	0
3139 ...	1	7	6
3140 ...	8	8	0
3141 ...	13	13	0
3143 ...	35	0	0
/A ...	51	0	0
3144 ...	49	15	0
/A ...	81	15	0
3145 ...	51	0	0

	£	s.	d.
3145/A ...	65	0	0
3146 ...	37	14	0
3147 ...	51	10	0
3150 ...	22	10	0
3152 ...	6	0	0
3153 ...	8	0	0
3156 ...	6	10	0
3157 ...	9	0	0
3160 ...	11	0	0
3161 ...	15	0	0
3164 ...	13	0	0
3165 ...	16	0	0
3168 ...	22	10	0
3169 ...	14	0	0
3220 ...	35	0	0
3236 ...	21	10	0
3239 ...	2	0	0
3242 ...	5	10	0
3243 ...	11	10	0
3246 ...	1	7	0
3247 ...	1	1	0
3255 ...	18	18	0
3257 ...	1	2	6
3259 ...	25	4	0
3260 ...	15	15	0
3261 ...	1	5	0
3264/A ...	4	15	0
/B ...	5	0	0
/C ...	5	7	6
3265/A ...		15	6
/B ...	1	7	6
3270 ...	2	0	0
3271 ...		19	6
3274 ...		6	0
3276 ...		3	6
3280 ...		3	0
3285 ...		3	0

	£	s	d.
3290 ...		5	0
3295 ...		15	0
3296 ...	1	0	0
3300 ...	1	5	0
3310 ...	7	15	0
3315 ...	6	5	0
3500 ...	23	10	0
3510 ...	6	10	0
3600 ...	20	0	0
3601 ...	1	18	0
3602 ...	1	4	0
3603 ...	1	3	0
3604 ...		15	0
3605 ...	2	10	0
3608 ...	9	9	0
3609 ...	11	0	0
3610 ...	1	10	0
3611 ...	1	10	0
3620 ...	5	10	0
3621 ...		18	0
3622 ...		19	0
3625 ...	2	0	0
3627 ...	3	10	0
3628 ...		15	0
3629 ...		7	6
3630 ...	12	12	0
3631 ...	2	2	0
3632 ...	15	0	0
3633/A ...	1	7	6
/B ...		15	0
/C ...		9	0
3635 ...	6	5	0
3636 ...	7	15	0
3637 ...	10	15	0
3638 ...	12	0	0
3639 ...	3	5	0
3640 ...	1	8	6

N.B.—The above are current prices at the time of going to press, but are liable to fluctuation.

Apparatus for Actino-Therapy

THE great therapeutic value of Ultra-Violet Radiation has of late years become more and more recognised, and considerable developments have been made with the necessary apparatus. In offering this revised edition of our previous list, we trust the additional information, embodying the most recent advances up to the time of going to press, will be of assistance to intending purchasers.

The three most generally recognised types of lamps suitable are the Quartz Lamp, in which the arc is formed by mercury vapour inside a tube of fused silica, the Carbon Arc and Tungsten Arc, which are "open" and in which the arc is formed between the two electrodes.

We have satisfied ourselves as to the construction of the various types listed, but we do not wish to express an opinion upon the comparative therapeutic efficiency.

The prices quoted do not include erection upon site as the work entailed varies so largely with local conditions, but we shall be happy at all times to submit inclusive estimates for any type of apparatus.

It will be of very great assistance if full particulars of the electrical supply is indicated at the time of enquiry, as the cost, etc., of the various apparatus largely depends upon whether direct or alternating current is available.

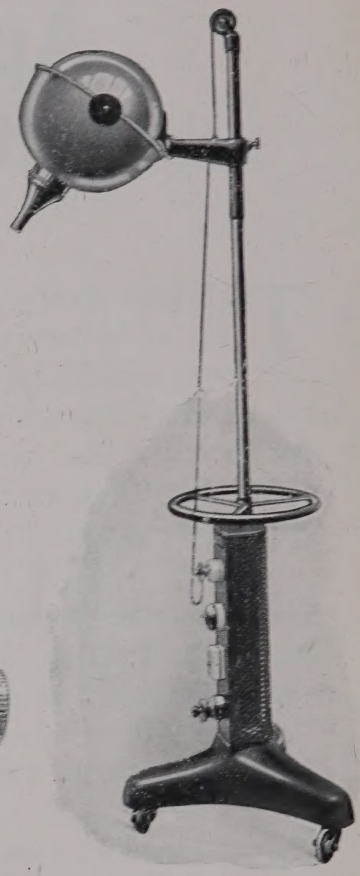
Mercury Arc Lamps

Atmospheric Type.

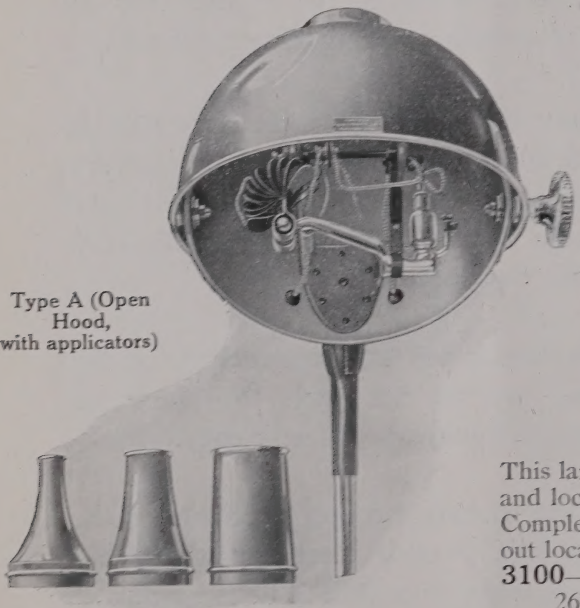
K.B.B. Type A.

FLOOR STAND MODEL.

The atmospheric burner is housed in a double hemispherical hood of polished aluminium. Counter-balanced vertical adjustment is provided. The resistance and switch-board are fitted at the base of the column which is mounted upon a heavy enamelled iron base with ball-bearing castors.



Type A



Type A (Open Hood, with applicators)

This lamp is suitable for general and local irradiation.
Complete as illustrated but without localising tubes.
3100—For direct current, 110-260 volts.

K.B.B. Type A2.

As above, but mounted upon a wall column. Vertical adjustment of 3 feet is provided.

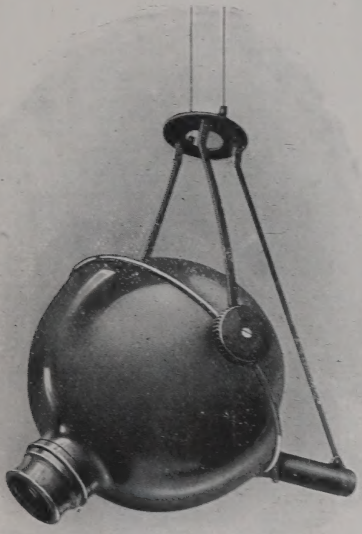
3102—For direct current, 110-260 volts.

3103—Localising tubes for the above lamps. **1a**—1 in. aperture. **1b**—2 in. aperture. **1c**—3·5 in. aperture. **1d**—Iris diaphragm $\frac{5}{8}$ to 3 ins.

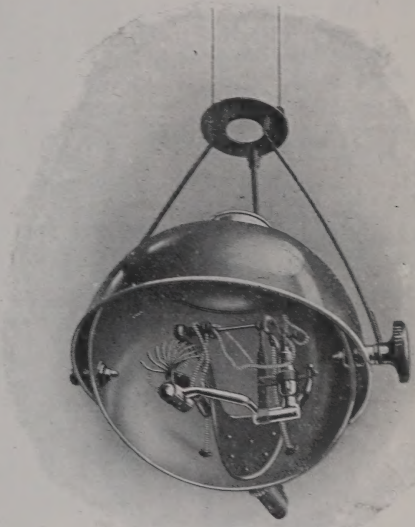
K.B.B. Type AS.

Burner and hood as above, but with counterweight ceiling suspension and wall type resistance.

3104—Complete for direct current as illustrated.



Type AS
Side View—Visor down.



Type AS
Front View—Visor up.

3105—This lamp can be supplied without counterweight suspension if required.

K.B.B. Type C.

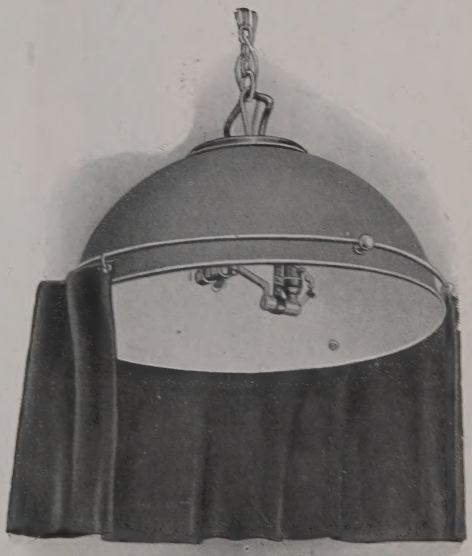
Ceiling suspension model. The housing in this case consists of a hemispherical vitreous enamelled reflector 20 ins. in diameter fitted with a velvet curtain which can be arranged to screen off the radiation from the face of the operator or patient.

Atmospheric type burner.

3107—For direct current, 110-260 volts.

3107/H—For direct current, 400-500 volts.

3108—Counterweight suspension extra.

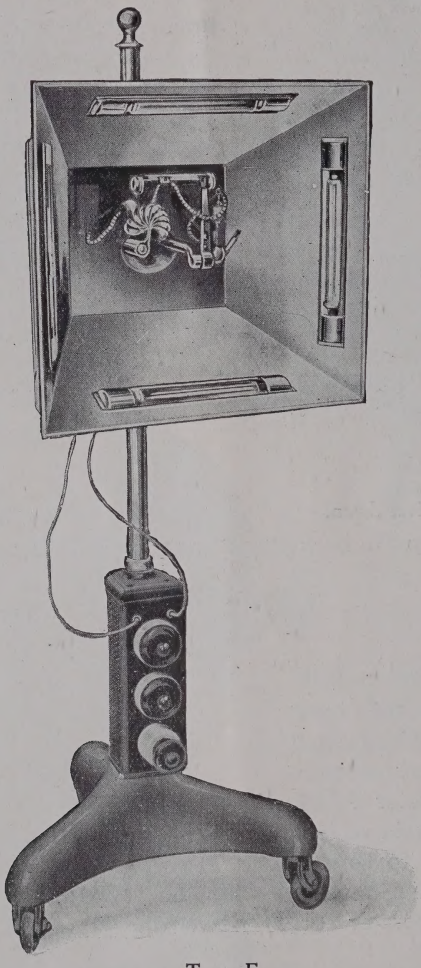


Type C

K.B.B. Type E.

Floor stand model, comprising an atmospheric type burner mounted in a rectangular reflector, and provided with four heating elements in silica tubes for the production of radiant heat.

The reflector measures 20 × 18 ins. and is capable of vertical or rotary adjustment on a vertical column, mounted in a heavy iron base provided with ball-bearing, rubber-tyred castors.



Type E

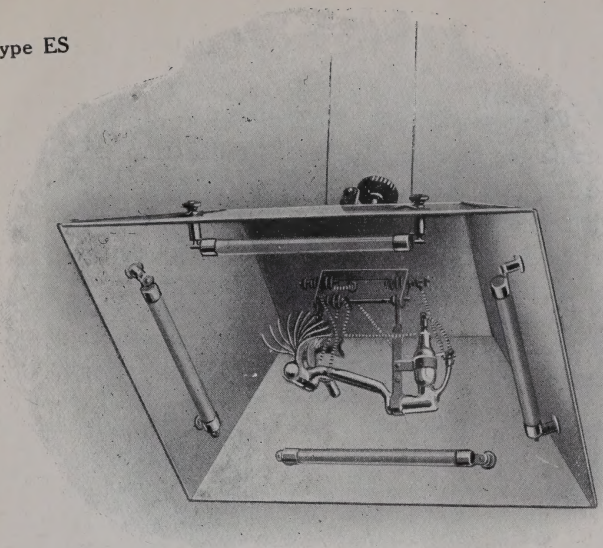
Separate control switches are fitted to the quartz burner and the radiant heat, so that these may be used independently or in conjunction.

The power required for the radiant heaters is 600 watts.

3110—Complete as above, 110-260 volts direct current.

3111—As above, but without radiant heat, 110-260 volts direct current.

Type ES



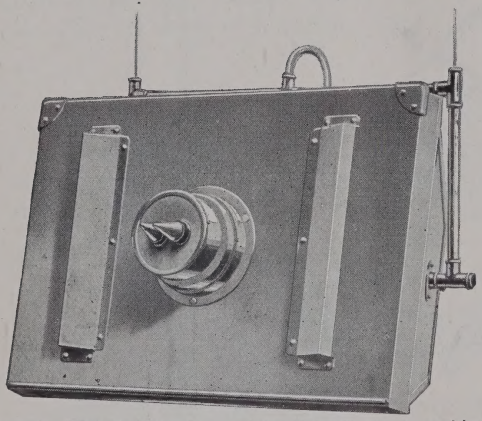
K.B.B. Type ES.

The burner and housing are in this case similar to type E, but arranged for ceiling suspension. The reflector is capable of being tilted from the horizontal to an angle of 45°.

3113—Complete as illustrated, with radiant heaters.

3114—As above, but without radiant heaters.

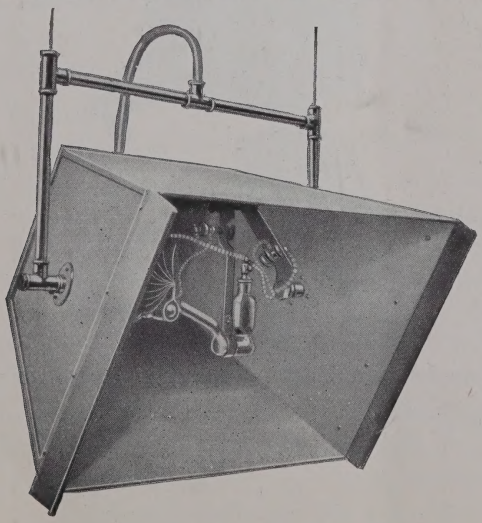
3115—Counterweight suspension to enable the height of the lamp to be adjusted extra.



Type R—With Front in place and Nasal Applicator in position

K.B.B. Type R.

Counterweight suspension type. The lamp may be tilted to any angle. A front cover is provided to which local applicators may be fitted. With the cover removed the lamp is suitable for general irradiation.



Type R—With Front removed for General Irradiation.

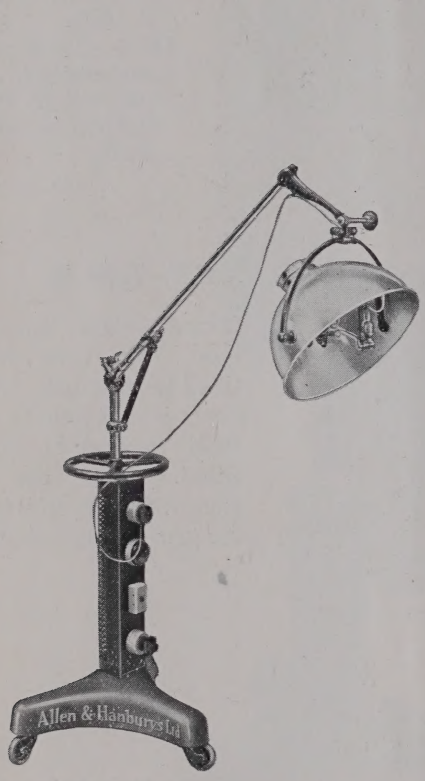
3116—Complete as illustrated with counterweight suspension, pulleys and cords, but not including local applicators. For direct current, 110-260 volts.

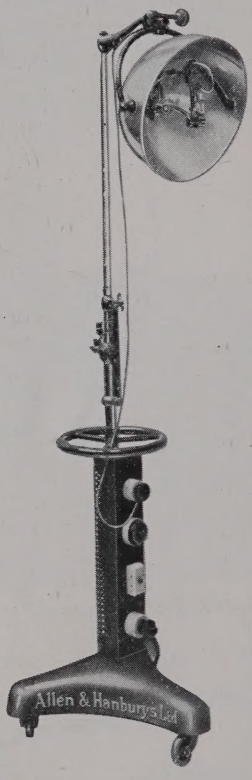
3117—Nasal Speculum with two applicators.

Universal Floor Stand Type.

3126—This lamp is suitable for local and general irradiation. The reflector is capable of rotation through 360°. The vertical column is pivoted just above the hand wheel, which makes a very convenient arrangement, particularly suitable for general practice. Rubber-tyred ball-bearing castors are fitted.

Localising tubes may be used as with Type A lamp.





N.B.—The K.B.B. Series of Mercury Vapour Lamps will work only from direct current. In cases where the main supply is alternating a Motor Generator or Valve Rectifier is necessary. Particulars on application.

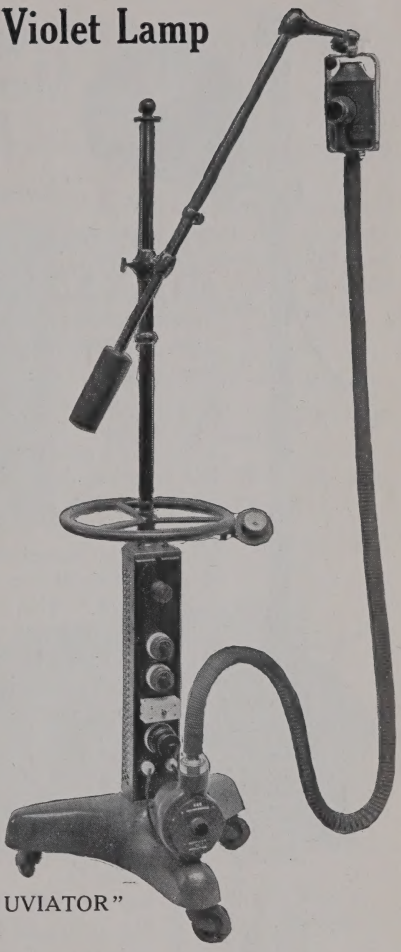
Spare Burner, atmospheric type, mounted in a suspension frame for any of the K.B.B. Lamps.

3122—110-260 volts.

3123—400-500 volts.

The "Uviator" Ultra-Violet Lamp

This lamp is designed for general, local and internal treatment. It consists of a specially constructed atmospheric quartz burner enclosed in an aluminium housing, ventilated and cooled by forced draught. The switchboard and resistance are mounted at the base of the vertical column. The mounting of the lamp consists of a universal arm, and a vertical column mounted in a heavy cast iron base, which is provided with rubber-tyred, ball-bearing castors. A large hand wheel is provided for ease of manœuvering.



"UVIATOR"

For General Treatment both cowls are removed and the lamp replaced in the stirrup. The patients sit in a circle round the lamp.

The "UVIATOR" in use as a HAND LAMP with Quartz Director.

For Local Treatment the first cowl is replaced, when the radiation will spread over an angle of 140°. With both cowls replaced the radiation emerges from a quartz window 1½ in. diameter.

For Internal Treatment, both cowls and the adapter should be in position. The quartz applicators are kept cool by a constant stream of air through the adapter.

3128—For direct current, 110-260 volts.

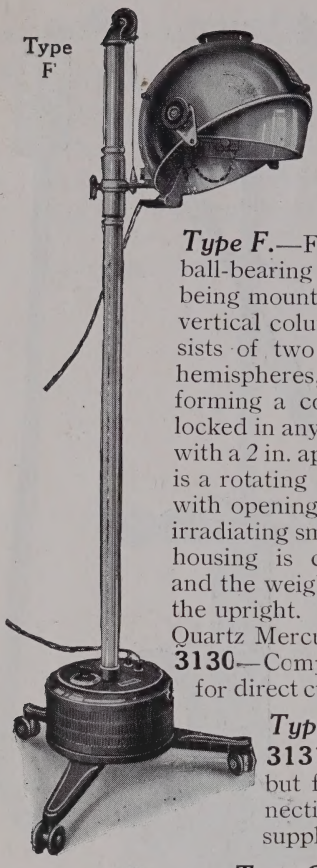
3129—Spare burner, 110-260 volts.

3129J—"Uviator Junior" model for direct current, similar to above, but without counterbalanced arm, ammeter, etc.

"Alpine Sun" Mercury Arc Lamps

Evacuated Type

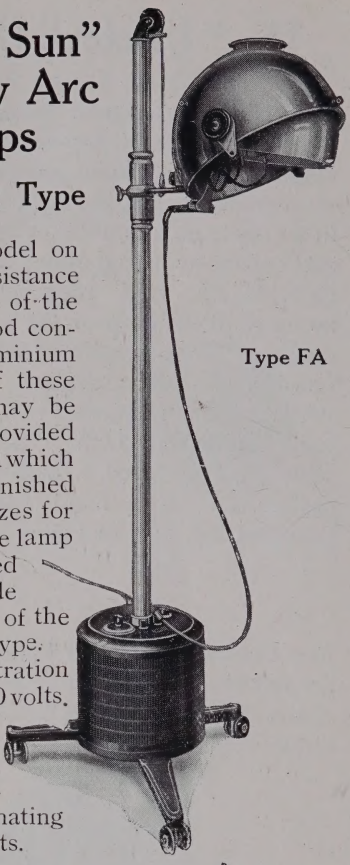
Type F



Type F.—Floor stand model on ball-bearing castors, the resistance being mounted at the base of the vertical column. The hood consists of two polished aluminium hemispheres, the lower of these forming a cover, which may be locked in any position is provided with a 2 in. aperture, behind which is a rotating diaphragm furnished with openings of various sizes for irradiating small areas. The lamp housing is counterbalanced and the weight travels inside the upright. The burner is of the Quartz Mercury Vacuum Type.

3130—Complete as illustration for direct current, 100-250 volts.

Type FA



Type FA.

3131—As above, but for direct connection to the alternating supply, 100-250 volts.

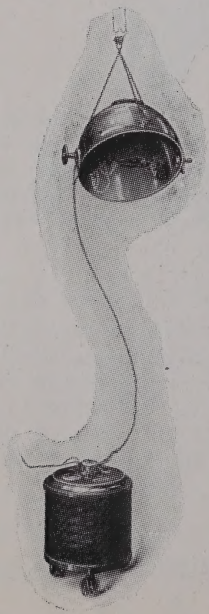
Type G.

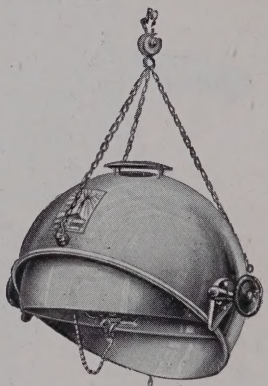
Burner and housing as above, but arranged for ceiling suspension with wall resistance.

3133—Complete for direct current, 100-250 volts.

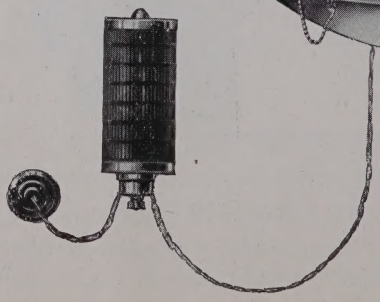
Type GA.—

3134—As above, but for direct connection to the alternating current supply, 100-250 volts.





Type GA



Type G

Type L.

Simplified ceiling suspension model. The housing in this case being a single aluminium hood with the burner and resistance mounted inside.

3137—Complete for direct current.

Type LA.

3138—As above, but arranged for connection to the alternating current main.

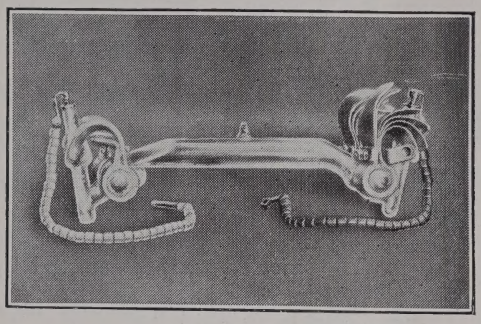


Fig. 3140

Counterweight suspension gear for G and GA suspension lamps (on page 10) and type L and LA to enable the height to be adjusted.

3139—Complete set, weight, cord and pulleys.

3140—Spare burner for direct current.

Burners for 150 volts cost ten per cent extra.

3141—Spare burner for alternating current.

Type J.

The standard model Jesionek lamp is designed to provide ultra violet flood lighting, and is suitable for use in clinics.

The reflector is of polished aluminium, measuring 36ins. × 18 ins. This reflector, together with the resistance, is mounted on a ball-bearing floor stand. The burner is of the evacuated type.

3143—Complete for direct current, 100-250 volts.

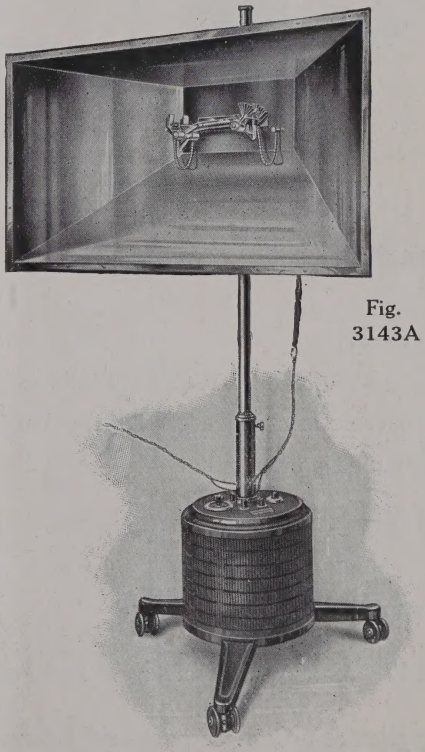


Fig. 3143A

Type JA.

3143/A—As above, but arranged for alternating current.

Type JC.

3144—Special Suspension Model, complete with two quartz burners, etc. with suspension gear for 100-250 volts direct current.

3144/A—Special Suspension Model as above, but for alternating current, 100-250 volts.

Type U.

Kromayer Universal Model Water-Cooled Lamp, embodying most recent advances in apparatus for local treatment. The unit is self-contained, carrying its own water supply and cooling apparatus.

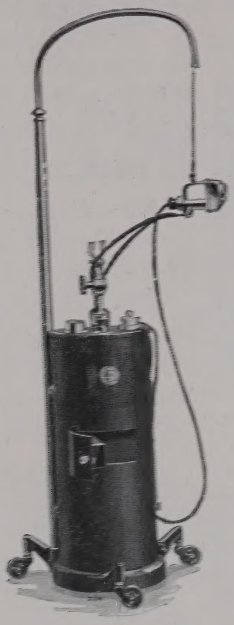


Fig. 3145

The burner is self-suspending in any position by means of counterbalance and is specially suitable for dental surgery and hospital ward work.

The motor pump is started by the burner switch, so that it is impossible to operate burner when the water is not flowing, provided the tank is filled.

3145—Outfit as above, for direct current.

3145 A—Outfit as above, but arranged for alternating current.

Type W.

Kromayer Standard Water-Cooled Lamp for local and internal irradiation. The cross arm which carries the burner is counterbalanced, and the resistance is mounted at the base of the column.

3146—Complete for direct current, 100-250 volts.

Type WA.

3147—As above, but arranged for alternating current, 100-250 volts.

Applicators, Compressors and Filters for the Kromayer lamp.

Prices on application.

Carbon Arc Lamps

Westminster Automatic Carbon Arc Lamps.

These lamps are in use in many child welfare clinics, and are undoubtedly ideal for this purpose.

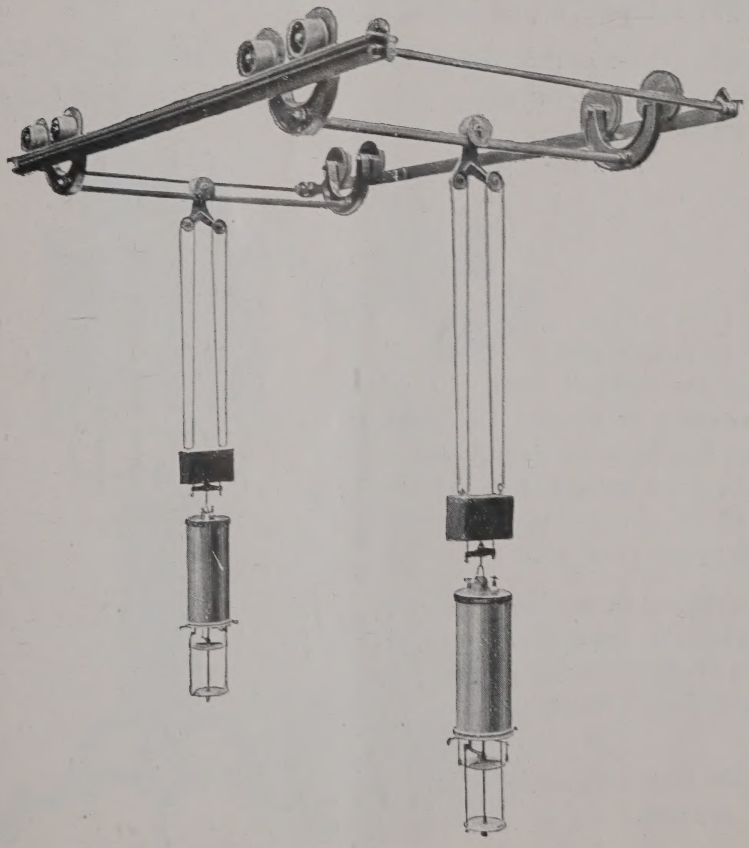
The electrodes are maintained automatically at a distance apart of 1·5 to 2 ins. thus giving a long flame arc which is richer in U.V.R. than the combined output of several small arcs consuming the same wattage.

All types of plain and cored carbons may be used with this lamp.

The overhead suspension, shown in the illustration, is an extra item.

3150—Westminster automatic arc lamp, 30 ampere type, for alternating or direct current.

3152—Regulating resistance for the above lamp, 100-120 volts direct current.



3153—Ditto 200-250 volts direct current.

3156—Regulating resistance for two lamps in series, 200-250 volts direct current.

3157—Regulating resistance for either one or two lamps in series as required, 200-250 volts direct current.

If the current is alternating the following should be used instead of the above resistances.

3160—Combined resistance and choking coil 100-120 volts, alternating current 40 to 60 cycles.

3161—Ditto 200-250 volts.

3164—As above, but for two lamps in series.

3165—As above, but for either one or two lamps in series, as required.

3168—Control switchboard of enamelled slate with ammeter, voltmeter, double pole switch, fuses, etc., on stand.

3169—As above, but for wall mounting.

NOTE : These control boards are supplied for alternating or direct current lamps. Dead surface fittings can be supplied on these boards if required, extra.

Four electrode carbon arc automatic type for voltages from 100-250 alternating or direct. The resistance in this model is mounted on the vertical column, and the base which is of cast iron is provided with rubber-tyred castors.

The feeding of the top carbons in this lamp is arranged automatically. The bottom carbons must be adjusted once every hour.

3220—Clinical model four electrode arc lamp.

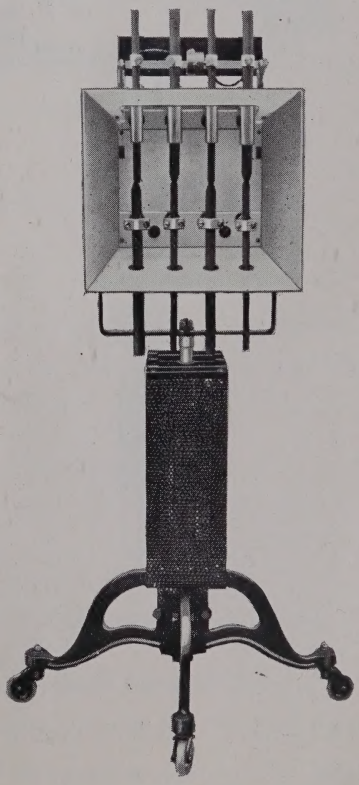


Fig. 3220

Tungsten Arc Lamps

"Holway" Hand Feed Tungsten Arc.

This lamp is very substantially constructed. Any type of carbon or pure tungsten electrodes may be used. The lamp is suitable for general or local treatment.

3236—Tungsten arc lamp as illustration complete.

3239—Localising reflector.

3242—Resistance, 5 ampere type, 100-250 volts.

3243—Ditto 10 ampere type, 100-250 volts, with switch and ammeter.

3246—Tungsten electrodes $\frac{1}{4}$ in. square section, 6 ins. long.

3247—Tungsten alloy electrodes, similar to above.

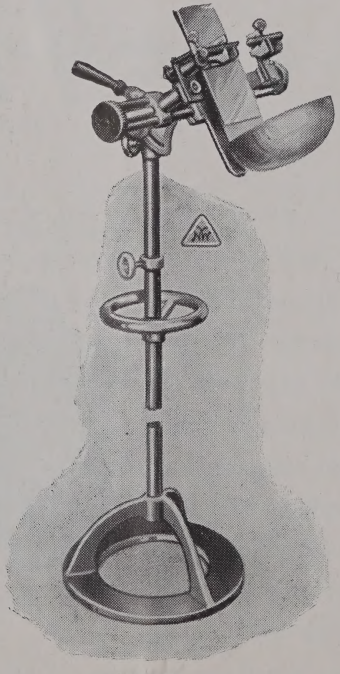


Fig. 3236

3255—Hand feed tungsten arc, adjustable to any voltage from 100 to 250 for direct current only. Complete with parabolic reflector, cover and localising tube with quartz lens, for local treatment.

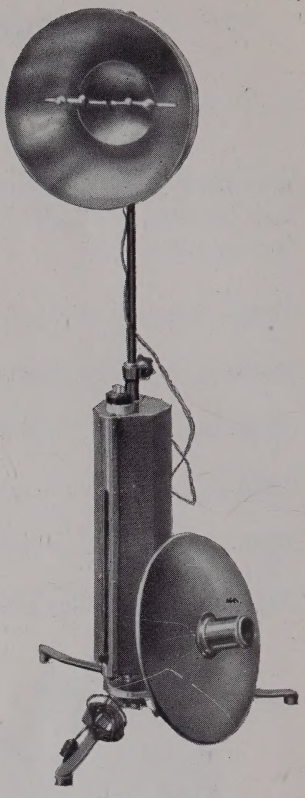
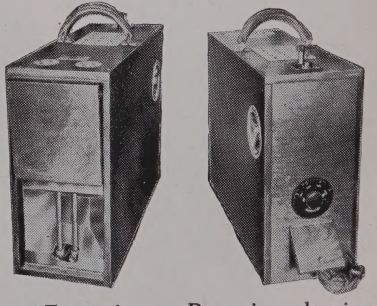


Fig. 3255

3257—Tungsten electrodes $\frac{5}{16}$ in. circular section, $3\frac{1}{2}$ ins. long.

3259—"Uvral Twin" portable tungsten and carbon arc for use on direct or alternating current circuits of any voltage from 100-240. The arc is controlled automatically and consumes 4 amperes. The unit complete, weighs 22 pounds. A particular point meriting attention is the automatic exposure controlling device which eliminates the possibility of over exposure. The arc cannot be switched on until the clock has been set to some predetermined exposure time. At the expiration of this time the arc is automatically switched off.



Front view. Rear view, showing Expometer.

Fig. 3259

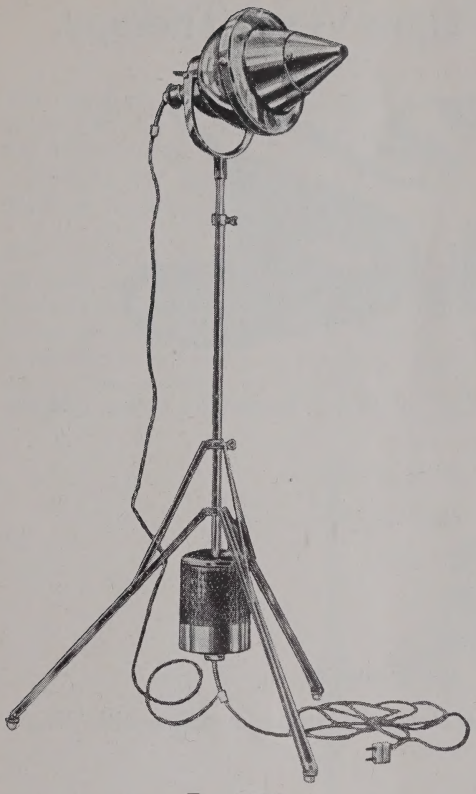


Fig. 3260

3260—"Apex" Portable Sun-Ray Lamp on tripod stand, heavily nickel-plated. Works on A.C. or D.C. supplies with resistance suitable for any voltage from 100-250. Consumes 10 amperes. Automatically controlled twin Carbon Arc giving spectrum analysis between 300-2100 A.V.

Specially suitable for whole-body irradiation; cone shaped applicators being provided for local treatment.

3261—Special Carbons for use with above per 100.

3264—Tungsten Filament Quartz Lamp, designed to produce a small amount of ultra-violet light in addition to general illumination.

Supplied for any voltage from 100-250.

/**a** 100 watt.
/**b** 200 ,,
/**c** 500 ,,

3265—Tungsten Filament "Vita Glass" Lamps, similar to above but with Vita glass bulb, limiting the far U.V. region. Any voltage 100-250.

/**a** 150 watt.
/**b** 300 ,,

Accessories for Ultra-Violet Therapy.

3270—***Goggles.*** Best quality, double removable optics, black frames, elastic head band.

3271—Ditto second quality, red fibre frames.

3274—Fur rim goggles, extra large optics.

3276—Leather frame, extra large optics.

3280—Aluminium frame, sterilizable.

3285—Children's, leather frame.

3290—***Test Dosage Armlet,*** Eidinow's pattern.

3295—***Levy-West Ultra-Violet Dosage Pastilles,*** complete with "Vita" glass filter and forceps, in case.

3296—Extra Pastilles per 100.

3300—***Exposure Timing Clock,*** with alarm.

3310—***Exposure Time Switch.*** This is an automatic switch, and may be set to control the lamp and switch off automatically at any predetermined time up to a maximum of 15 minutes.

3315—***Consulting Room Couch,*** with adjustable head rest constructed in birch and polished oak, mahogany or walnut, upholstered in red or green.

Ultra-Violet Spectrometers.

3500—***Model 1 (Hilger).*** This instrument is in permanent adjustment, and is provided with a fluorescent screen of uranium glass, and a direct reading scale calibrated from 1,850 to 8,000 Angstrom units.

3510—***Model 2 (B. & S.)*** Small hand pattern. This instrument is in permanent adjustment. Fitted with fluorescent screen and illuminated direct reading scale.

Apparatus for Heliotherapy.

The apparatus described in the following pages can be used as an adjunct to any of the machines listed under the heading of "Apparatus for Ultra-Violet Therapy," especially Mercury Vapour Lamps, or separately for the treatment of conditions in which it is desired to produce hyperæmia.

The "Sollux" range of Radiant Heat Lamps are highly efficient and produce a maximum amount of radiation, which can be effectively localized owing to several important features in design. The source of luminous heat is a special bulb, which contains nitrogen at two-thirds atmospheric pressure, enclosing a closely wound filament of tungsten wire. The wattage consumption in the case of the floor standard type is 1,000, and in the case of the "Cemach" model 300 watts.

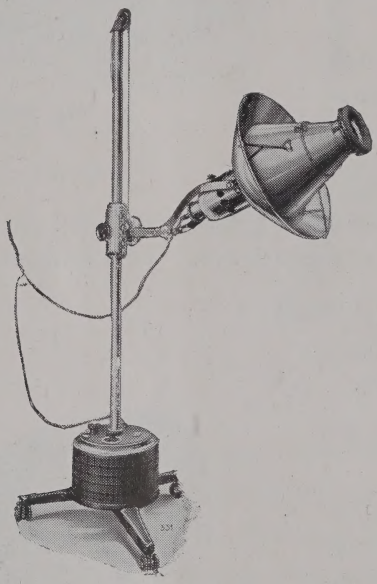


Fig. 3600/1/2.

3600—"Sollux" Luminous Heat Lamp on floor stand, for attachment to any main supply, complete with one special bulb fitted in polished parabolic reflector with focussing adjustments. The reflector is mounted to a cross arm which can be raised, lowered and tilted.

3601—Conical Reflector Attachment for localized exposures.

3602—Conical Reflector, smaller size, forming an extension of the above, with cork ring.

3603—Nickel-plated Filter Frame.

3604—Red, Blue or Daylight Filters.

3605—Spare Bulb, 1,000 watt, for above.

3608—"Sollux Cemach" Luminous Heat Lamp, on table stand, complete with 300 watt bulb.

3609—"Sollux Cemach" Lamp as above, but mounted on wall bracket.

3610—Spare bulb, 300 watt, for above.

3611—Kieffer Localization Tube, particularly suitable for Dental work.

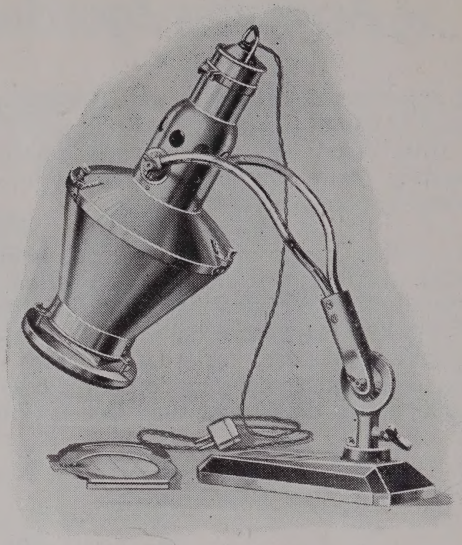


Fig. 3608

3620—"Icalite" Radiant Heat Lamp, mounted on floor stand, with 13 in. reflector and one 350 watt bulb, complete with red or blue screen.

3621—Spare Glass Screen, red or blue.

3622—Spare Bulbs, 350 watt type

3625—"Thermolite" Radiant Heat Lamp, reflector only and one 200 watt bulb.

3627—Lamp as above, but mounted on light floor stand, telescopic.

3628—Glass Screen to clip on front of reflector, red or blue.

3629—Spare Bulb, 200 watt type.

Fig. 3625

3630—Open-type Parabolic Reflector, mounted on floor standard adjustable for height. Complete with one 1,500 watt bulb in vitreous enamelled shield. White enamelled and dull nickel-plate finish.

3631—Glass Screen for above to clip on front of reflector.

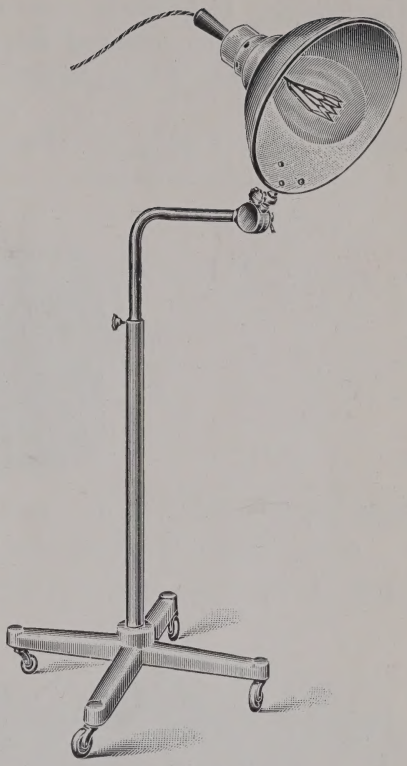


Fig. 3630

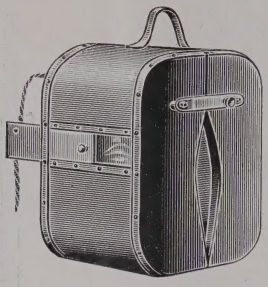
3632—Open-type Parabolic Reflector, mounted on wall bracket, with counterweight complete, including one 250 or 500 watt bulb. The size of the reflector opening is 18 ins. and a parallel beam of evenly distributed heat is obtained.

3633—Spare bulbs for above

/a	1,500	watt type
/b	500	,, ,,
/c	200	,, ,,

The following Light Baths cover the range of appliances used for general irradiation, utilizing the light and heat properties of a number of standard incandescent bulbs.

3635—Portable Folding Light Bath, for treatment of joints, fitted with six carbon filament lamps.



3636—Portable Light Bath, for treatment of trunk, fitted with nine carbon filament lamps and two switches.

3637—As above, but fitted with twelve lamps.

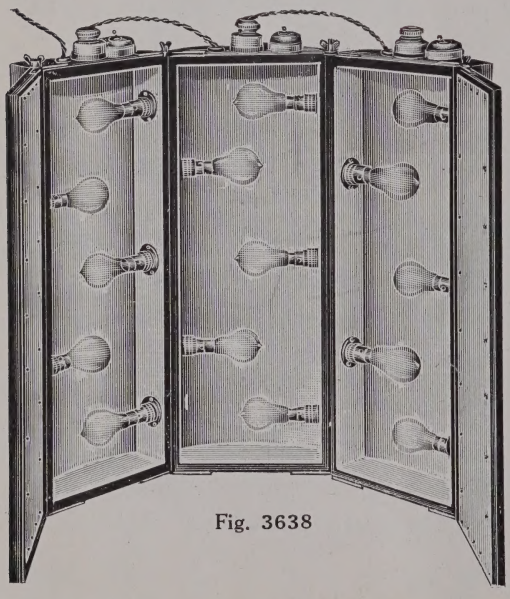


Fig. 3638

3638—Kelly's Portable Folding Trunk Bath, consisting of separate panels each containing five carbon filament lamps which can be clamped together by a special locking device, with two plain flaps forming the sides enabling any size of bath to be easily assembled. Each panel is fitted with a separate switch and cable. Per set complete with two side flaps.

3639—Light panel only, as above, each.

3640—Canvas case to hold above.

Whole Body Heat and Light Baths, cabinet or reclining type, quoted for specially in accordance with size and number of lamps required.

Jr